

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Grass Land Colony Inc. 904 Eden Rd. Box 88, Sand Coulee, MT 59472
2. Type of action: Groundwater Application for Beneficial Use Permit #41J 30068585
3. Water source name: Groundwater
4. Location affected by project: Section 1, T18N R3E, Cascade County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:
This project is for the water supply to a proposed new colony in Cascade County approximately 14 miles south of the city of Great Falls, Montana. The colony would provide residential, agricultural and commercial activity for up to 150 people. The Applicant proposes to divert groundwater from the Madison Formation via a 1554 foot deep well at a rate of 55 GPM up to 62.5 AF/YR. The diversion is located in the NWNESE Section 1 T18N R3E, Cascade County and would occur from January 1 through December 31 each year. The water would be used for multiple domestic, stock, lawn and garden and industrial purposes. The place of use is located in the W2 Section 1 T18N R3E, Cascade County. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Department of Fish, Wildlife and Park
Montana Department of Natural Resources and Conservation
Montana National Heritage Program
United States Fish and Wildlife Service
United States Department of Agriculture Natural Resources Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – The source of supply is groundwater. The appropriation of groundwater will deplete the Missouri River near Great Falls, Montana. The Applicant will purchase water from the United States Bureau of Reclamation to mitigate that depletion in full. The Missouri River is a periodically dewatered stream only in the reach above Townsend.

Determination: No impact.

Water quality – There are no water quality issues with groundwater from the Madison Formation in the area of the proposed diversion.

Determination: No impact.

Groundwater – The proposed project will divert 62.7 AF/YR of water from the Madison Formation. The amount of water available in the area exceeds legal demands on the aquifer based on analysis by Department of Natural Resources and Conservation hydrogeologists and drawdown from the well is acceptable. There is no return flow to the aquifer so no change in water quality is expected. The appropriation may deplete surface water in Giant Springs and the adjacent reach of the Missouri River; however, the Applicant will be required to mitigate that depletion in full.

Determination: No significant impact.

DIVERSION WORKS - The well is far removed from any surface water sources and will not impact channel, flow, riparian areas, or dams. The well was constructed by a licensed Montana well driller.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – There are no species of concern within the area of the proposed project and the Bald Eagle is the only species of special status according to the Montana National Heritage Program. There are no plant species of concern or potential concern in the area. The potential impact on surface water will be mitigated by the Applicant. The lack of species of concern and the same aerial extent of the project suggest that there will be no impact.

Determination: No impact.

Wetlands – There are several small palustrine emergent wetlands and open water bodies in the vicinity of the proposed project. These are all related to local springs that emerge from aquifers shallower than the one proposed for appropriation. These wetlands would be unlikely to be affected by the withdrawal of water from the deep aquifer.

Determination: No significant impact.

Ponds – A 10 AF irrigation water storage pit is proposed. No release of water from this pit is proposed and the pit is not designed to be stocked with fish.

Determination: No impact.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - The principle soils in the region of the proposed project are Absarokee clay loam, Bitton and Roy soils and Sinnigam loam. These soils are non-saline to very slightly saline. The area of the proposed project has very low slope and is currently used for agriculture. Low slopes and chemistry of soils indicate that soil quality and stability will not be impacted.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – There is no natural vegetative cover in the area. The area of the proposed project is currently in agricultural production. Construction in the area may provide an opportunity for the spread of noxious weeds. It will be the responsibility of the landowner to deal with noxious weeds.

Determination: No significant impact.

AIR QUALITY – The proposed use includes multiple domestic residences and stock barns including pigs, fowl and dairy cows. The effluent from the residences would be held on site. Although no air quality standards are likely to be exceeded, potentially objectionable odors are a possibility. No other landowners have residences within a half mile of the proposed project. One of the industrial uses proposed is a concrete plant with the potential for adding dust to the air.

Determination: Possible impact.

HISTORICAL AND ARCHEOLOGICAL SITES – The proposed project is not located on State or Federal land.

Determination: Not applicable.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No other demands on environmental resources of land or water are recognized because water is addressed above and the land is already in agricultural production. The addition of domestic and industrial uses and stock barns will require that a new supply of energy be provided to the project.

Determination: Possible impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known local environmental plans or goals

Determination: Not applicable.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – The area at present is in agricultural production and contains no roads. There are no recreational or wilderness sites in the area and no access to such sites through the area.

Determination: No impact.

HUMAN HEALTH – The proposed project is to construct a colony on previously farmed ground. No obvious impacts to human health are recognized with the possible exception of dust.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No__**X**_

Determination: Not Applicable

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? Transition of some acres from agricultural to residential and commercial uses. No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? Creation of dwellings for up to 150 people where there are no inhabitants at present. No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? Some increase in activity. No significant impact.
- (h) Utilities? Need for a power source or power line to the proposed colony. No significant impact.
- (i) Transportation? Need for a road to the proposed colony. No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts are recognized.

Cumulative Impacts: There are no pending permits or construction activities in the region and thus no cumulative impact is foreseen.

3. *Describe any mitigation/stipulation measures:* The Applicant will purchase water from the U.S. Bureau of Reclamation to mitigate anticipated depletion of water from the Missouri River.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* The only available alternative to the proposed action is a no action alternative. While the no action alternative would have no environmental impacts, it would prevent the construction of a colony to provide residential, agricultural and commercial activity for to up to 150 individuals.

PART III. Conclusion

1. *Preferred Alternative:* Issue a beneficial water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

2 *Comments and Responses:* None

3. *Finding:*
Yes___ No_X__ Based on the significance criteria evaluated in this EA, is an EIS required?

No significant impacts to the environment were encountered in the preparation of this environmental assessment and therefore it is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison

Title: Hydrologist/Water Specialist

Date: 5/6/2014